

**IN THE ABSTRACT OF THE DISCLOSURE:**

Please replace the original abstract with the following new abstract:

A method of diagnosing a semiconductor processing apparatus for imparting plasma treatment to a sample arranged in a vacuum process chamber, which apparatus includes a plasma generator for generating plasma inside the vacuum process chamber and process gas introducer for introducing a process gas into the vacuum process chamber, includes the steps of imparting mechanical oscillation to the semiconductor processing apparatus and detecting mechanical oscillation generated by the step of imparting mechanical oscillation inside the semiconductor processing apparatus.